

Book Reviews

Dengue: Guidelines for diagnosis, treatment, prevention & control, (World Health Organization, Geneva) 2009. 157 pages. Price: US \$ 40.00; in developing countries: CHF/US\$ 28.00
ISBN 978-92-4-154787-1

The guidelines for diagnosis, treatment, prevention and control of dengue provide a concise source of information of worldwide relevance on dengue to health practitioners, laboratory personnel, those involved in vector control and other public health officials.

The first chapter focuses on epidemiology, burden of disease and transmission describing dengue as most rapidly increasing viral disease in the world with 30-fold increase (50 million dengue infections annually) in last 50 years and geographically expanding. With the revision of IHR 2005, dengue is also an example of disease that may constitute public health emergency of international concern. About 75 per cent of the current global disease burden is in SEA Region and Western Pacific Region. Though case fatality rates for the SEA Region are approximately 1 per cent, in India, Indonesia & Myanmar focal outbreaks away from urban areas have reported case fatality rates of 3-5 per cent. Dengue is now a reportable disease in Pakistan.

Four countries in the Western Pacific Region *viz.* Cambodia, Malaysia, Philippines and Vietnam reported highest number of cases in this Region. In the Americas dengue re-emerged with the largest outbreak in 2002. Though surveillance data are poor in African region, it is clear that most epidemics are occurring in Eastern Africa, and to a smaller extent in Western Africa.

A revised dengue case classification has been suggested in terms of levels of severity which is more practical for use by clinicians in taking decision as to where and how intensively the patient should be observed and treated, and will help in more consistent

reporting in national and international surveillance system.

The guidelines advise on the warning signs, which include abdominal pain, persistent vomiting and clinical fluid accumulation. The criteria for severe dengue are severe haemorrhage, severe plasma leakage and severe organ impairment. The key for saving lives is early recognition and understanding of the clinical problems during different phases of the disease, leading to a rational approach to case management and good clinical outcome. Activities at the primary and secondary care levels (where patients are first seen and evaluated) are critical in determining the clinical outcome of dengue.

Details of resources needed for detection and management of patients have been very well described which can help dealing with cases of dengue and DHF.

The second chapter describes importance of education/ training of medical and paramedical persons, education of community and emphasizes on involvement of mass media for creating awareness among community and suggests that warning signs and information regarding dengue should be printed and distributed in the community. Step-wise approach for management of dengue and DHF which includes investigations, diagnosis, assessment of disease phase and severity, and management will help the clinician in treatment at all levels with various severities of dengue. Algorithm of fluid management may serve as a ready reckoner for fluid therapy in compensated shock patients. Due emphasis has been given for treatment of complications of dengue and DHF. Textboxes at the end of the chapter summarise important aspects of differential warning signs, haemodynamic assessment, admission and discharge criteria, and intravenous fluid

calculations. A comprehensive chart for dengue case management which includes assessment, classification and management can be replicated and may be displayed in the hospitals managing the dengue patients.

Vector management and delivery of vector control services is an exhaustive chapter covering all aspects of vector control including environment management, adulticides, larvicides, safe use of insecticides, monitoring of insecticide susceptibility and biological control methods. A mention about the improved tools for vector control *viz.* insecticide treated materials and lethal overlaps are still the subjects of operational research but have not been sufficiently field tested under programmatic conditions for recommendations to be made for their use as public health intervention. For delivery of vector control interventions importance of inter-sectoral co-ordination, advocacy and social mobilization and legalization have been discussed in details. Integrated approach for *Aedes* control with control of pests or vector of other diseases may be more cost-effective and help in development of programme.

Chapter on laboratory diagnosis and diagnostic tests explains the immunological response in primary and secondary dengue and choice of most appropriate diagnostic test. Current diagnostic methods of virus isolation, RT-PCR, Real-time PCR, NS-1 antigen detection, MAC-ELISA and new tests under development have been deliberated. Issues of quality assurance and biosafety have also been touched upon.

The chapter on surveillance, emergency preparedness and response provides an overview of the key areas of preparedness planning, epidemic detection and emergency response for dengue containment and control in endemic countries. Sustainable solutions to dengue control require political will and leadership.

The components of dengue surveillance including disease epidemiological surveillance (including an early warning system, laboratory-based surveillance) entomological surveillance, and monitoring of environment and social risks have been described at length.

An overview of elements of comprehensive dengue prevention and control programme including dengue emergency response planning, risk assessment and identification of outbreaks and trigger for an epidemic response and human resource planning is given. Successful dengue control programmes have

integrated vector control with public health education and community involvement in risk reduction activities as major components.

The last chapter focuses on research on dengue vaccines and antiviral drugs. It states that primary prevention of dengue is currently possible only with the vector control and personnel protection from the bites of infected mosquitoes. However, the development of vaccines and drugs has the potential to change this. There are four types of dengue vaccines under development *viz.*, live attenuated viruses, chimeric live attenuated viruses, inactivated or subunit vaccines, and nucleic acid-based vaccines. First generation vaccines are under advanced stages of development and may be licensed in next five to seven years. The chapter concludes with the remark “although vaccines and drugs for dengue pose significant challenges driving both product development and field testing, tremendous strides have been made recently in both areas”.

The guidelines provide an updated practical information on the clinical management and delivery of clinical services, vector management and delivery of vector control services; laboratory diagnosis and diagnostic tests; and surveillance, emergency preparedness and response and can assist in the development of national guidelines.

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Stabbed in the back: Confronting back pain in an overtreated society, 1st ed., N.M. Hadler (The University of North Carolina Press, USA) 2009. 224 pages. Price: US\$ 25.00
ISBN 978-0-8078-3348-3

In this book Nortin M. Hadler gives an insight into the very common problem of backache. As per the author “To live a year without a backache is abnormal. It is an intermittent predicament in life.”

The initial chapters deal with the history of regional back pain, causes and some of its more frequent complications, particularly nerve compression. The author tries to bring out how we are still uncertain of our understanding of the causes and treatment of back pain and how legacies from the past influence

our clinical thinking and public health policies. Community epidemiology provides insight into the contribution of psychosocial confounders in chronic back pain and the role of coping in management. As per the author fibromyalgia, better termed as chronic widespread pain, is a social construction. It is the suffering consequent to uncertainties due to the pain, rather than the pain itself, that leads such people to seek medical care. Hence the suffering demands recognition and care.

Clinical aspects of regional low back pain and the various treatments are discussed in the central chapters. The author analyses that there is no point in routinely trying to find a patho-anatomical cause of regional back pain. Every patient should not be subjected to imaging studies since changes are often found in normal individuals of that age and most often it is not possible to ascribe a certain finding to be responsible for the cause of that episode of back pain. The perception of pain, includes an important element of cognition, particularly the suffering that overlays the pain. Allopathy has still not found a cure for back pain. Neither complementary and alternative medicine, nor surgical procedures like Chymopapain like injection, IDET, discectomy and fusion have withstood scientific testing for their effectiveness. He feels that surgeons have become very aggressive and tries to bring out the nexus between the industry and the surgeon.

In the final chapters, the author dissects the ergonomic fallacy as well as the flaws in the American health care system and suggests some measures for reform. He challenges the notion that backache is an injury and feels that convergence of Mixter's concept of discal rupture and the worker's compensation insurance scheme has transformed backache at work into a surrogate complaint. It is more common for a worker dissatisfied with his working conditions to portray back pain as an injury.

However, the consequences are unlikely to be the worker's advantage. The author feels that the worker's compensation system is spending the majority of its resources on treatments that are ineffective as well as lack scientific support. He points out the shortcomings and disparities of the existing US health care system which relies on the health insurance industry and talks about the need for reform. Before it is put to use, effectiveness of a drug or a device should have been clearly demonstrated by a randomised controlled trial in which the drug or device should have been

compared with an established gold standard of treatment. He proposes a state based system of Health Assurance & Disease Insurance to come out of these problems.

The book is meant for those suffering or likely to suffer from back pain. Since this would encompass a large proportion of the population, one could say that the book is meant for the society in general. The author perhaps also intends to carry a message for health professionals and the industry. He proposes health care policy reforms, and thus may have intended it for policy makers as well.

Rather than publishing a medical textbook or a self help manual, the author has written the book with the aim of educating those suffering or likely to suffer from back pain about the advancements in our understanding of back pain so that they could interpret professional opinion in a proper manner, not be misled by industry and take appropriate decisions. The author hopes to change attitudes and entrenched practices and attempts to change the way we think about and react to low back pain.

The book brings out the supreme talent of the author with the language and his in depth knowledge of back pain. It is a thought provoking book and there may be a lot of truth in the basic message that the author may be trying to convey. However, he may have been a bit overzealous in his attempt to make "an assault on the backache industry", with the result that it does not seem to reflect a very balanced view of the prevailing scenario. It is true that imaging is often overused, procedures overperformed and devices overused in the management of backache leading to overdiagnosis and mismanagement. It is also true that there have been increasing reports of unethical practices and the influence of industry on the medical community. However, this cannot be used to make a generalized statement to indict all service providers, as a significant proportion of the common lay person readers is likely to interpret, and should not undermine the role of a judicious use of imaging as well as conservative and surgical management of backache for which there is a reasonable scientific evidence. Also the book may have relevance for America and other countries with similar health care policy and not for countries like India and China where worker's compensation insurance scheme is not effective, where fusion surgeries for backache are not common and overall incidence of spine surgeries is far lower.

The book is recommended to patients, lay persons and professionals. They should however keep in mind that the author may have resorted to exaggeration at places in order to drive his message home and should be able to interpret the book accordingly.

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